

**Apple III**



## **Monitor III**

**Owner's Manual**



<http://www.turbo-2.com/apple/>

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## IMPORTANT

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate the computer with respect to the receiver
- move the computer away from the receiver
- plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the US Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.



You have just purchased a state-of-the-art Monitor III, specially designed for use with your Apple III computer. In addition to its professional styling, this Monitor has a number of special features, including 1,920 character display capability, sharp focus over the entire screen, and less geometrical distortion than that found with other monitors. It comes wired for either 117 VAC 50/60 Hz or 230 VAC 50/60 Hz operation, which means it can be used in the United States, Europe, and most other countries.

In the interest of safety, read this manual carefully before using your new Monitor III. Keep the warranty and the schematic circuit diagram with this manual so they are easy to find if you need them. All you need for connection to the Apple III is a video cable with a phono plug on each end. (See Video In on page 3.)

## Safety Tips

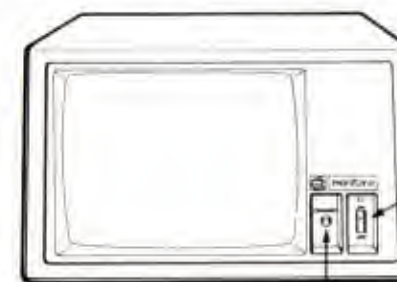
1. Make sure the voltage designation on your Monitor corresponds to the local electrical supply before connecting the AC power cord to an outlet.
2. To avoid electric shock, never touch the inside of the Monitor. Only a qualified technician should open the Monitor's case.
3. Never use your Monitor if the power cord has been damaged. Do not allow anything to rest on the power cord, and keep the cord away from where people will walk on it.
4. Be sure to hold the plug, not the cord, when disconnecting the Monitor from an electric socket.



5. Openings in the Monitor cabinet are provided for ventilation. To prevent overheating, these openings should not be blocked or covered with anything. Also, avoid using the Monitor on a bed, sofa, rug, or other soft surface, because doing so may block the ventilation openings in the bottom of the cabinet. If you put the Monitor in a bookcase or some other enclosed space, be sure that adequate ventilation is provided.
6. Be careful not to insert anything metallic into the Monitor openings. Doing so may create a danger of electric shock.
7. Put your Monitor in a location with low humidity and a minimum of dust. Avoid places like damp basements or dusty hallways.
8. Do not expose the Monitor to rain or use it near water (in kitchens, next to swimming pools, etc.). If the Monitor accidentally gets wet, unplug it and contact an Apple dealer immediately. You can clean the Monitor with a damp cloth when necessary, but be sure to unplug the Monitor first.
9. Place the Monitor on a solid surface, and treat it kindly. The screen is made of glass and can be damaged if dropped or hit sharply. Also, the textured glare filter that rests over the screen is made of nylon filaments and can be torn if not treated with care. Read the section on "Glare Filter Care and Cleaning" for complete instructions.
10. If your Monitor does not operate normally--in particular if there are any unusual sounds or smells coming from it--immediately unplug it and contact an Apple dealer.
11. High temperatures can cause trouble. Try not to use your Monitor in direct sunlight, and keep it away from heaters, stoves, fireplaces and other sources of heat.
12. Unplug the Monitor when it is going to be left unused for an extended period of time.

## Identification and Operation of Controls

Monitor III (front)



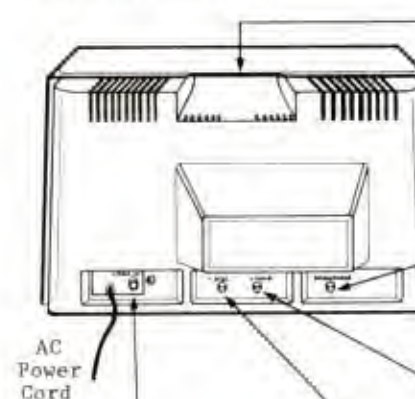
**Power Switch**

This switch turns the Monitor on and off.

**Contrast**

The contrast increases as this knob is turned clockwise.

Monitor III (back)



**Hand Grip**

When using the Hand Grip, be sure to put your hand all the way into the opening before lifting the Monitor.

**Brightness**

This knob permits adjustment of overall picture brightness. Maximum brightness is reached as the knob is turned clockwise.

**Vertical Hold**

If the picture rolls up or down, turn this knob clockwise or counterclockwise until the picture stabilizes.

**Vertical Size**

This knob adjusts the height of the picture, and thus of the characters displayed.

**Video In**

Plug one end of a video cable into this socket, and the other end into the Apple III B/W Video Output socket.

## Glare Filter Care & Cleaning Instructions

The microporous glare filter that rests in front of the display screen can be kept clean and dust-free by occasionally wiping the surface of the filter with the cleaning cloth provided.

After a long period of use, the filter surface can be given a more thorough cleaning. To do this, gently rub the filter surface with a clean lint-free cloth that has been dampened with a small amount of isopropyl alcohol. (Use some cloth other than the one used for dusting the Monitor.) This alcohol cleaning can be done while the filter is in place on the screen.

If something that is not easy to clean is spilled on the filter, the best thing to do is to have the filter removed by an Apple Dealer and either thoroughly cleaned with isopropyl alcohol or replaced with a new filter.



Monitor III Resting on an Apple III Computer

## If There Are Problems

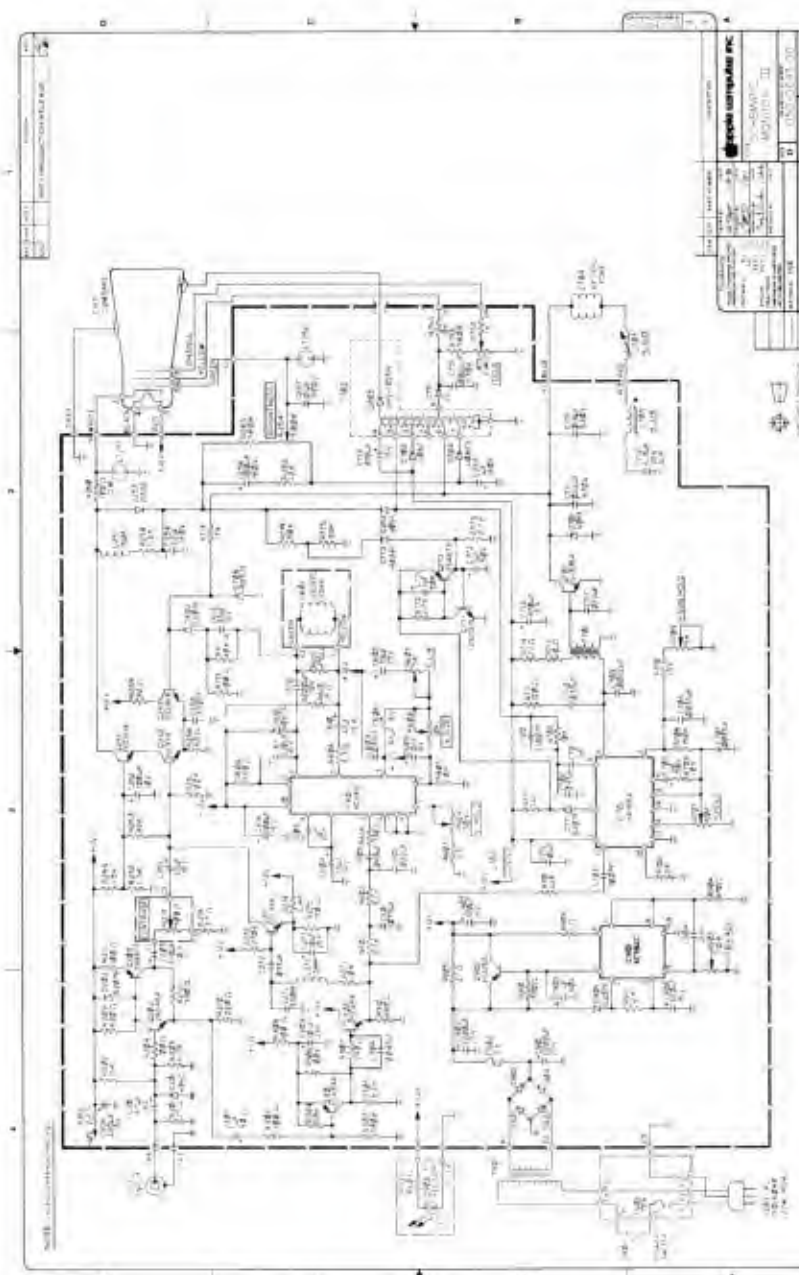
This chart is designed to help you solve the most common problems that you may have with your Monitor III. If you are unable to remedy a problem using the suggestions here, contact your Apple dealer.

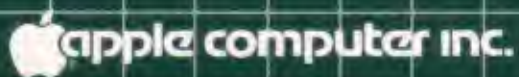
Problem	Cause	Remedy
Monitor is turned on, but display is not working.	Bad connection to power socket.	Insert the power cord plug into the socket properly.
	The video cable is not connected properly to the Video In plug on the Monitor, or to the Apple III.	Connect the video cable properly.
	The Contrast Control knob is turned too far counter-clockwise.	Turn the Contrast Control knob clockwise until display appears.
Display is on but characters do not appear.	The Brightness Control knob is turned too far counter-clockwise.	Turn the Brightness Control knob clockwise until display appears.
	The video cable is not connected to the Video In terminal properly.	Connect the video cable properly.
	Input signal needs adjustment.	There may be a problem with the Apple III; contact your dealer.
Display vibrates slightly.		
Display rolls up or down.	Vertical Hold control is not properly adjusted.	Turn Vertical Hold control until display stabilizes.
Display is either too high or too low on screen.	Vertical Size control is not properly adjusted.	Turn Vertical Size control until display is satisfactory.



## Specifications

Power Input:	117 VAC $\pm$ 10%, 50/60 Hz (A3M0006/A3M0039). 230VAC $\pm$ 15%, 50Hz (A3M0024). 27 W typical, 45 W maximum. Internal fuse protection.
Video Input:	1.0 V peak to peak $\pm$ .1 V composite. Sync negative, RS-170 compatible. 75 ohm internal termination. Cabinet-mounted RCA phono jack connection.
Video Amplifier:	Bandwidth 50 Hz to 15 MHz $\pm$ 3 dB. 16 discernible shades of grey.
Cathode Ray Tube:	12" (30.5 cm) diagonal. 78° horizontal deflection. 61° vertical deflection. 90° diagonal deflection.
Vertical Deflection:	47 Hz to 63 Hz, free running. Pull-in range plus 0 minus 8 Hz. Retrace time 1.0 $\mu$ s maximum. Linearity within 2%.
Horizontal Deflection:	15,200 Hz to 16,300 Hz, free running. Pull-in range $\pm$ 400 Hz. Retrace time 12.0 $\mu$ s maximum. Linearity within 2%.
Display Performance:	Resolution: 700 TV lines center, 500 TV lines corners. Max brightness 40 fL (A3M0006), 20 fL (A3M0039/A3M0024) at rated input. Interlace 90% or better. Apple III format display zone: Width: 8 7/16" (21.4 cm) Height: 6 5/16" (16 cm). 80 characters x 24 lines.
Mechanical:	External Dimensions: Width: 17 3/16" (43.7 cm) Height: 10 5/8" (27 cm) Depth: 12 1/2" (31.8 cm). Weight: 16.5 lbs. (7.5 kg).





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